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03-13-01
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RAW SEQUENCE LISTING DATE: 02/09/2001
PATENT APPLICATION: US/09/771,161 TIME: 11:00:07

Input Set : A:\Sequence Listing.txt
Output Set: N:\CRF3\02092001\I771161.raw

ENTERED

see p. 5

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```

85 <212> TYPE: DNA
86 <213> ORGANISM: Homo sapiens
88 <220> FEATURE:
W--> 89 <221> NAME/KEY: -
90 <222> LOCATION: (1)..(1669)
91 <223> OTHER INFORMATION: "n" can be any nucleotide 'a', 'c' , 'g' or 't'
94 <400> SEQUENCE: 2
95 accttagttt tacccagata tttcatatattt ataggtctaa tctctagaac catccgtcc 60
97 tggtagttat tggtagattt cgaggatgaa gctctgagac actgagagaaa ggttaccaat 120
W--> 99 taatatgagc caggattcaa agtctgtgtt tnctaaagtt atttcccggtt ctacactgtc 180
101 ttttccttca gttatatgtt atattctcaa ctctttatattt ttttttccaa tggattttgt 240
103 acaaacatataaaaatgtt agatgttattt ttacttctat aatttcctaa tcatctccag 300
105 ttaaaatgttataatattttt tggatatttccatgttccatg agtggtttcaa gtggccatcca 360
107 cctatgtgac aagaagaaaa tggaaatatttctcgttacatc cttgttacatc atgggtccaca 420
109 agaggaaatc tggatgttccatcgttccatc tggaaatagt ggttctctg aaacttcaag 480
111 gtccctgcca gtccttcaag acaatgattt ttatctaga aagactcaag actgttattt 540
113 tatgaagtcg catcaactgtc ctggaaatca cagttggat agcaccatctt ctggatctca 600
115 aagggtctca ttctgttgc acaagaccac tccatgtctt tccatgttccatc taaatccact 660
117 ctcaactgtca ggaaacttca aacgtctgcg gctctgttgc gcccacggat ggttccagag 720
119 caaaaggaa gacattgttca accaaatgtac aagacgttcg cttaaacatc cyctagatgc 780
121 ctttctgtcc agggacttgc tcatgaaaga ggtatgttccatgttccatc tttttttttt 840
123 aaggaccatca aaagtccatc aatttacttgc cactactgtc atccaaaggag aagaatttgc 900
125 caaaatgttataatgttccatc tggaaatgttccatc aaaaatgttccatc ggttccatc 960
127 aatacttgc ttttctatc caccatctt aatttacttccatc aaaaatgttccatc gcatgttcaat 1020
129 gactgttttccatc aagaagaaaa tggatgttccatc aaaaatgttccatc gttgttttgc 1080
131 ctttttttttataaaatccatc tggatatttgc agtcttttgc aaggttccatc ggttccatc 1140
133 tagtctccatc ccatgacactt gcatgttccatc tttttaatttgc tttttaatttgc tttttaatttgc 1200
135 ttttctatc agtgcattt ttatgttccatc tttttaatttgc tttttaatttgc tttttaatttgc 1260
137 gtaatttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 1320
139 ttcacatccatc ttttctatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 1380
141 gaagtatataatccatc ccccttaccc accagagacatc gtttccatc tttttaatttgc tttttaatttgc 1440
143 ttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 1500
145 tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 1560
147 aaaaatgttccatc aaaaatgttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 1620
149 ctgttccatc aaaaatgttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 1669
152 <210> SEQ ID NO: 3
153 <211> LENGTH: 1101
154 <212> TYPE: DNA
155 <213> ORGANISM: Homo sapiens
157 <400> SEQUENCE: 3
158 gtcggccctt gggcgccggcc gagcgcccgcg cgagcaggag cggcgccggcc ggcggccggcc 60
160 gcccggaggag gcaagccgcg cccaaatgtt cggacgttgc ggcgggttgc ggcggacgttgc 120
162 gtcacatgtt ggcgttgc aagagcaagg ccaacgcggcc cggcgccgcg agcaagaaga 180
164 tactgttgc cggccggccgc atccgttgc ttttccatc tttttaatttgc tttttaatttgc 240
166 aggtgttgc ttttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 300
168 gctgttgc ttttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 360
170 acggatgttgc ttttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 420
172 acatcatgttccatc ttttccatc tttttaatttgc tttttaatttgc tttttaatttgc tttttaatttgc 480
174 tccaaaggccatc cccggatccatc ttttccatc tttttaatttgc tttttaatttgc tttttaatttgc 540

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269	cgtccccgaca	cctgcccccc	cgagctgtac	cgcggcgtca	tcgcccggty	ctggcgacgc	1860
271	cggccccgagg	agcgccccac	cttcggatcc	ctgcggatccg	tgctggaggaa	cttcgtacacg	1920
273	ccacccggacg	ggcgatcga	gctcgagccc	tagccggcc	egccccgcctg	cgccccgtgc	1980
275	ccacccgtgc	cgccggacacc	ccggatcccg	tgccatccca	gacggggccgc	gaaggcggggg	2040
277	tgtcgccctgt	gcccctttct	cagacccggaa	atccggatggg	cagaggcggc	ttccgggggg	2100
279	gtccccggac	ggactcttcc	accgactgya	ccccggggcg	atggatccgg	cctctctgtg	2160
281	ccgcttcatt	tgtagaggggc	tgttaacagt	acttcggcgg	gtcatccgg	gtactaaggc	2220
283	ccatgtttgtt	gttcggact	ggttaacggc	tgtcatcaag	taaggcccc	gtgctgggca	2280
285	ccccccgtgc	tgccggcg	ccggatcccg	cgccctcggt	ggccccggcc	ctggcccgct	2340
287	acagaaggca	gactgggtcc	cgcggacggc	agcaggggca	gccccggctt	aggctgcgt	2400
289	ccagcactgc	ggggcttttc	tgcataataag	tcaacggcgt	tgcggatgtc	a	2451
292	<210>	SEQ ID NO:	5				
293	<211>	LENGTH:	692				
294	<212>	TYPE:	DNA				
295	<213>	ORGANISM:	Homo sapiens				
297	<400>	SEQUENCE:	5				
298	ggaggcgyc	acatttttc	aagtggccca	aattgacaag	agcgagagg	atactgcgtt	60
300	ccatcccgac	ccggggccac	ggtaactggc	ccctgtttccc	ccttcctcgcc	ccccggagac	120
302	cagggtcgc	cttctcgagg	gttcccgagg	ccccgtccca	ggggccgggt	gaccggactc	180
304	gctggcgctt	catggggaa	ttccaaaagg	tggaaaaggat	cgggaggggc	acgtacggag	240
306	tttgttacaa	agccggaaac	aagtggacgg	gaggggtgt	ggccgttaag	aaaatccggc	300
308	tggacactga	gactgggggt	gtgcccggta	ctggccatccg	agagatctct	ctgtttaagg	360
310	agcttaacca	tcctaaattt	gtcaactgc	tggatgtcat	tcacacagaa	aataaaaata	420
312	tttttttaaa	agaaggatgg	acaattatatt	ttatatttca	gttataatcc	aatagtagag	480
314	ttggcttttt	tttttttttt	ttggctatag	tgggtggatt	tggccatg	tgccaccttgg	540
316	ggttttgtta	tgacagtgct	aaaaaaaaaa	aacatttttt	ttttttatgt	ttgtctctgt	600
318	cacccttgc	cttgagtgct	cttgcattta	acgttatttg	taatttatgt	tgtatgtat	660
320	aaaaaaaaatg	tgcctatgtt	tatagttcaa	aa			
323	<210>	SEQ ID NO:	6				
324	<211>	LENGTH:	842				
325	<212>	TYPE:	DNA				
326	<213>	ORGANISM:	Homo sapiens				
328	<400>	SEQUENCE:	6				
329	ccccaaaacaa	cagcggatga	tatcttccaa	gtgtctgtc	gggacacggc	ttcagccctc	60
331	tgtggtc	tctcccccgg	ggggctttggg	atctttgtca	agtccttca	agagcctgca	120
333	agacttaac	cagccaccca	gagttccctc	actgaagatc	tgcggatggc	ccggggacgg	180
335	gcaactgcgg	acttcatttc	tgcacaggac	ttctatgaga	attatggatc	caaaagatc	240
337	ctggggcaggg	gcgttagcag	tgtggtcagg	cgatgcattcc	acaaggccac	gagccaggag	300
339	tacggcgtya	aggcgtatcg	cgatccgggt	ggggggatgt	tgcggccgg	gggggtgcgg	360
341	gagctgcgg	aaggccacgt	gaagggggt	gacatccgtc	gcaagggtctc	aggggcccc	420
343	aacatcgat	tacatgtaa	ggacatatt	gagaccaaca	tttttttttt	ttttgtgtt	480
345	gacctgtat	agagaggggg	gcttttgac	ttacactact	gagaagggtca	ccttgatgt	540
347	gaaggaaacc	agaaagatca	tgcgatct	gttggggatgt	atctgcaccc	tgcacaaact	600
349	caacatcg	cacccggacc	tgaagccca	gacatttctc	ttggatgaca	acatgaacat	660
351	caagctcaca	gacttttgc	tttctcgat	gttggatgt	ggggggatgt	tgcggatgt	720
353	ggttaacatgc	cttggccac	gtccaggcc	cggtgtctca	atcaaccatc	tgcggatgt	780
355	agatggctgc	gttttctccc	ctaacttaat	tgtccctgg	aataaaaatt	ccaccatttc	840
357	aa						
360	<210>	SEQ ID NO:	7				

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361 <211> LENGTH: 676
362 <212> TYPE: DNA
363 <213> ORGANISM: Homo sapiens
365 <400> SEQUENCE: 7
366 gtgagccacc gccccagcc tggctggca tttcttgag ttcaggaagt gtgacaagga 60
368 tttggacacc cagaataag cgwgtcgmgm wgmcrcaag sagmegrkcc agcgctcg 120
370 atggcgagc cagatcttgcgtt gtcgagcag atccgtctga aytgtattcc tggacatgt 180
372 ccggagtg aaggagttt agaaatgttcc cccatttggaa ggggttacct acggcattgt 240
374 gtatcggcc cggacaccc agacatgttcc gatttgcgtt ctttggaaagg tggatgtt 300
376 caaggagaag gatggcatcc ccatcagcag ctggcgggatcc atcactgtc tggatgtt 360
378 gctgtatcc aacatgttcc agctgttcc ggtgggttgc gggaaaccac tggatgtt 420
380 ctctctgttgc atgggttact gtgacgttcc cctggccagc ctctctgttcc atatgcca 480
382 acccttctcg ggggttccagg tcaatgttcc cgtgttccgtt gttgttccggg gctccatgt 540
384 ttcgttccagg aacttccatgttcc ctttggggatcc ctttggaaagg tttttttttt tcatgaccgt 600
386 caagggttgcgtt gttttttttt gttttttttt gttttttttt gttttttttt tagatggcac 660
388 ttgggttccatgttcc aacatgttcc 676
391 <210> SEQ ID NO: 8
392 <211> LENGTH: 1019
393 <212> TYPE: DNA
394 <213> ORGANISM: Homo sapiens
396 <400> SEQUENCE: 8
397 cgtctgttcc tggctggcg ggggttccatgttcc aacatgttcc 60
399 ctgcagggttcc gttttttttt gttttttttt gttttttttt gttttttttt gttttttttt 120
401 cacttccatgttcc aacatgttcc 180
403 catctggccg ggttttttttccatgttcc aacatgttcc 240
405 ctacaacaac ctgttccatgttcc aacatgttcc 300
407 ttctctgttcc tttttttttt gttttttttt gttttttttt gttttttttt gttttttttt 360
409 tttttttttt gttttttttt gttttttttt gttttttttt gttttttttt gttttttttt 420
411 ccaggcttccatgttcc aacatgttcc 480
413 acttcttccatgttcc aacatgttcc 540
415 cggggggccatgttcc aacatgttcc 600
417 cagggttccatgttcc aacatgttcc 660
419 gggttccatgttcc aacatgttcc 720
421 aqaggccatgttcc aacatgttcc 780
423 ttggctgttcc aacatgttcc 840
425 gtatgggttcc aacatgttcc 900
427 aggcttccatgttcc aacatgttcc 960
429 gttttttttt gttttttttt gttttttttt gttttttttt gttttttttt gttttttttt 1019
432 <210> SEQ ID NO: 9
433 <211> LENGTH: 848
434 <212> TYPE: DNA
435 <213> ORGANISM: Homo sapiens
437 <400> SEQUENCE: 9
438 gtgagccacc gccccagcc tggctggca tttcttgag ttcaggaagt gtgacaagga 60
440 tttggacacc cagaataag cgwgtcgmgm wgmcrcaag sagmegrkcc agcgctcg 120
442 atggcgagc cagatcttgcgtt gtcgagcag atccgtctga aytgtattcc tggacatgt 180
444 ccggagtg aaggagttt agaaatgttcc cccatttggaa ggggttacct acggcattgt 240
446 gtatcggcc cggacaccc agacatgttcc gatttgcgtt ctttggaaagg tggatgtt 300
448 caaggagaag gatggcatcc ccatcagcag ctggcgggatcc atcactgtc tggatgtt 360

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fyi

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:89 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:2
L:99 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:2
L:203 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:4
L:221 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:635 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:12
L:641 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:948 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:19
L:1002 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:1004 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:1006 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:1008 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:1019 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:20
L:1075 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:1077 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:1081 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:1145 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:22
L:1171 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22
L:1205 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:24
L:1211 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:1213 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24
L:1258 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:25
L:1264 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1272 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:1327 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:26
L:1333 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1341 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:1610 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:31
L:1682 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:1786 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:33
L:1876 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:35
L:1921 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:36
L:2354 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:41
L:2360 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41
L:2792 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:45
L:2864 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:2875 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:46
L:2881 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:2883 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46
L:3363 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:54
L:3426 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:55
L:3438 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:55
L:3660 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:59
L:3774 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:59
L:3978 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:63
L:4024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63

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L:4032 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:63
L:4074 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:65
L:4106 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:65
L:4335 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:70
L:4610 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:73
L:4616 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:73
L:4709 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:74
L:4715 M:341 W: (46) "n" or "Xaa", used, for SEQ ID#:74
L:5266 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:83
L:5312 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:83
L:5323 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:84
L:5351 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:5353 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:5454 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:87
L:5460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:87
L:5649 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:90
L:5655 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:90
L:5760 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91
L:7165 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:116
L:7172 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:116
L:7235 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:117
L:7242 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:117
L:7770 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:124
L:7783 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:124
L:8616 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:136
L:8743 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:136
L:11376 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:178
L:11383 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:178
L:11565 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:181
L:11572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:181
L:11656 M:257 W: Feature value mis-spelled or invalid, <221> Name/Key for SEQ ID#:182
L:11663 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:182